

### Remarks

Reconsideration of the present application is hereby requested.

In regard to the claims:

Claims 1 to 30 were and are currently pending in this application.

Claims 1 to 30 have been amended. In particular, claims 1 to 30 have been amended to address the Section 112 rejections set forth in the First Office Action by replacing the phrase "metal/magnetic" with the phrase "metal and magnetic", while claims 1, 14 and 24 have been further amended to clarify the meaning of the word "discrete" by adding the phrase "wherein the discrete indicia are not directly connected to adjacent indicia by metal or magnetic material disposed on a surface of the carrier substrate." Support for this amendment can be found in paragraph [0012] of the application, as filed. No new matter has been added.

The undersigned wishes to thank the Examiner for the courtesy extended in granting the telephone interview of Thursday, August 19, 2004.

In regard to the rejection of claims 1 to 30 under 35 U.S.C. § 112, second paragraph, Applicant submits that the above-referenced amendments to claims 1 to 30 serve to render this rejection moot.

In regard to the rejection of claims 1 to 8, 10 to 12 and 24 to 29 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,803,503 to Kaule *et al.* in view of U.S. Patent No. 5,697,649 to Dames *et al.*, Applicant submits that this grounds for rejection is untenable and should be withdrawn. Nothing in Kaule *et al.*, alone or in any permissible combination, teaches or even remotely suggests the metal and magnetic security device of claims 1 to 8, 10 to 12 and 24 to 29.

The present invention, as amended, relates to a metal and magnetic security device comprising:

- (a) a carrier substrate having a length; and
- (b) security detection features disposed on at least one surface of the carrier substrate, wherein the security detection features comprise:
  - (i) an optionally repeating pattern of:
    - discrete metal and magnetic indicia; and
    - discrete metal or metal-dot formed indicia,
  - (ii) optionally, at least one metal strip extending along the length of the carrier substrate, and
  - (iii) optionally, a plurality of metal dots formed on at least one surface of the carrier substrate,wherein the discrete indicia are not connected or linked to adjacent indicia by the metal or magnetic materials used to form the indicia.

U.S. Patent No. 5,803,503 to Kaule *et al.* does not disclose a security device that employs an optionally repeating pattern of discrete metal and magnetic indicia and discrete metal or metal-dot formed indicia.

Instead, this reference teaches a security element having an “all-over” metal coating with recesses. By employing an “all-over” metal coating, positive aspects of prior art security threads, including a strong optically variable effect and the possibility of machine testing, are preserved. More specifically, this reference teaches at Col. 1, lines 66 to 67, that “[t]he essence of the invention is the combination of a magnetic security feature with negative writing, ...”, with the phrase “negative writing” being described as recesses formed in a metal coating on a transparent plastic film. See Col. 1, lines 28 to 38, of Kaule *et al.*

Unlike that submitted by the Examiner, the figures in Kaule *et al.* do not show discrete or separate indicia, where the threads shown in each of these figures are produced by providing a plastic film with an “all over” metal coating. See Col. 3, lines 50 to 51, Col. 4, lines 16 to 17, and Col. 5, lines 30 to 31, of Kaule *et al.* As such, the

indicia, in the form of recesses, are connected or linked to each other by the metal coating.

It would not have been obvious to add the soft magnetic metal indicia and magnetic and/or non-magnetic metal indicia of Dames *et al.* to the multiple-security featured security device of Kaule *et al.*, where the proposed modification would diminish, if not destroy, the desirable properties of the Kaule *et al.* security device, namely, the strong optically variable effect and electric conductivity. As noted in Col. 2, lines 11 to 15, of Kaule *et al.*, the metallicity reflective surroundings of the negative writing ensures that the thread is very striking in transmitted light. The removal of portions of the metallicity reflective surroundings as a result of the proposed modification would diminish this feature and thus be seen as undesirable by those skilled in the art. As noted in Col. 6, lines 1 to 9, of Kaule *et al.*, cracks in the metallicity conductive layer of its security device lead to a complete loss of electric conductivity. As such, breaks in the metallicity reflective surroundings that would result from the addition of the Dames *et al.* indicia would likewise be deemed undesirable by those skilled in the art.

In addition, Applicant submits that Dames *et al.* also fails to teach or suggest a security device that employs an optionally repeating pattern of discrete metal and magnetic indicia and discrete metal or metal-dot formed indicia. Instead, this reference teaches an article that, in a preferred embodiment, comprises:

- (1) a first security feature made from a soft magnetic metal material;  
and
- (2) a second security feature made from magnetic and/or non-magnetic metal formed indicia.

In contrast, the present invention does not employ a security feature made from only a soft magnetic metal material.

In view of the above, Applicant submits that Kaule *et al.* teaches away from the subject invention in which an “all-over” metal coating with recesses is not used, that it

would not have been obvious to modify the security device of Kaule *et al.* as proposed by the Examiner, and further that the combination of the Kaule *et al.* reference with Dames *et al.* would not result in the invention of claims 1 to 8, 10 to 12 and 24 to 29.

In regard to the rejection of claims 9, 13 and 30 under 35 U.S.C. § 103(a) as being unpatentable over Kaule *et al.* in view of Dames *et al.* and U.S. Patent No. 5,573,639 to Schmitz *et al.*, Applicant submits that this grounds for rejection is in error and should be withdrawn. In view of the arguments set forth above, the proposed combination of references would not have been obvious nor would it result in the invention of claims 9, 13 and 30.

In regard to the rejection of claims 14 to 18 and 20 to 22 under 35 U.S.C. § 103(a) as being unpatentable over Kaule *et al.* in view of Dames *et al.* and U.S. Patent No. 5,949,050 to Fosbenner *et al.*, Applicant submits that this grounds for rejection is also in error and should be withdrawn, where the proposed combination would not have been obvious nor would it result in the invention of claims 14 to 18 and 20 to 22.

In regard to the rejection of claims 19 and 23 under 35 U.S.C. § 103(a) as being unpatentable over Kaule *et al.* in view of Dames *et al.*, Fosbenner *et al.*, and Schmitz *et al.*, Applicant submits that this grounds for rejection is also in error and should be withdrawn, where the proposed combination (for the reasons stated above) would not have been obvious nor would it result in the invention of claims 19 and 23.

Early reconsideration of the subject patent application is respectfully requested. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Respectfully submitted,



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